

Claims

1. (currently amended) A nanocomposite material comprising

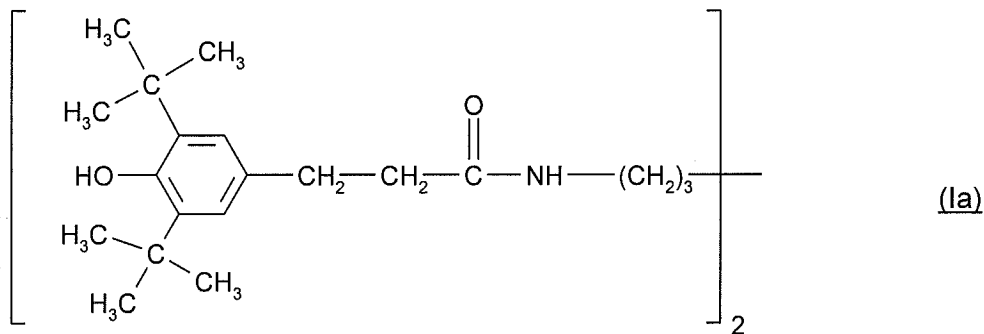
a) a synthetic polymer,

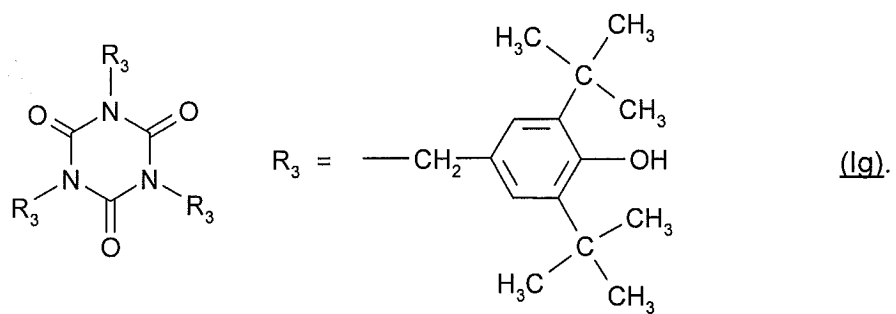
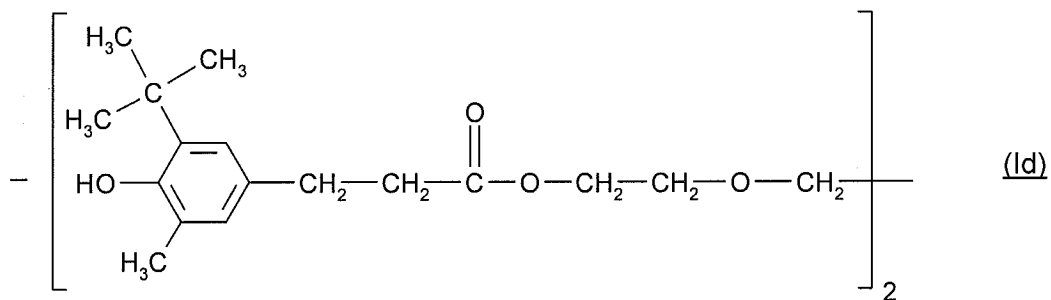
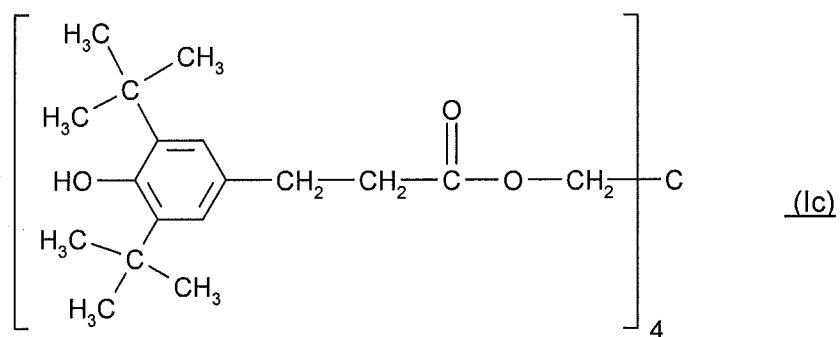
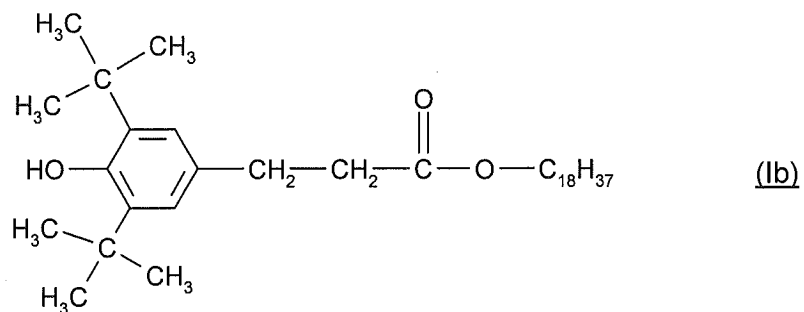
b) a natural or synthetic phyllosilicate or a mixture of such phyllosilicates in nanoparticles, which are modified by an ammonium or phosphonium compound,

c) a phenolic antioxidant and/or a processing stabilizer, and

d) a mono or polyfunctional compound selected from bisphenol A diglycidyl ether, bisphenol F diglycidyl ether, diglycidyl 1,2-cyclohexanedicarboxylate and phenol novolak epoxy resin,
~~the class consisting of bisphenol A diglycidyl ether, bisphenol F diglycidyl ether, diglycidyl 1,2-cyclohexanedicarboxylate, phenol novolak epoxy resin, oxazolines, oxazolones, oxazines and isocyanates~~

wherein component (c) is tris(2,4-di-tert-butylphenyl) phosphite, bis(2,4-di-tert-butyl-6-methylphenyl) ethyl phosphite, bis(2,4-di-tert-butylphenyl) pentaerythritol diphosphite, tetrakis(2,4-di-tert-butylphenyl) 4,4'-biphenylenediphosphonite, 3-(3,4-dimethylphenyl)-5,7-di-tert-butylbenzofuran-2-one, 3-(2,3-dimethylphenyl)-5,7-di-tert-butylbenzofuran-2-one, and/or a compound of the formula Ia, Ib, Ic, Id or Ig





2. (original) A nanocomposite material according to claim 1, wherein component (a) is a polyolefin.

3. (canceled)

4. (original) A nanocomposite material according to claim 1, wherein component (b) is a montmorillonite, bentonite, beidelite, mica, hectorite, saponite, nontronite, sauconite, vermiculite, ledikite, magadite, kenyaite, stevensite, volkonskoite or a mixture thereof in nanoparticles.

5-11. (canceled)

12. (original) A nanocomposite material according to claim 1, wherein component (b) is present in an amount of from 0.01 to 30 %, based on the weight of component (a).

13. (original) A nanocomposite material according to claim 1, wherein component (c) is present in an amount of from 0.01 to 5 %, based on the weight of component (a).

14. (original) A nanocomposite material according to claim 1, wherein component (d) is present in an amount of from 0.01 to 5 %, based on the weight of component (a).

15. (original) A nanocomposite material according to claim 1, comprising in addition, besides components (a), (b), (c) and (d), further additives.

16. (previously presented) A nanocomposite material according to claim 15, comprising as further additives modification agents for nanocomposites, compatibilizers, light-stabilizers, dispersing or solvating agents, pigments, dyes, plasticizers or toughening agents.

17. (previously presented) A nanocomposite material according to claim **15**, comprising as further additives modification agents for nanocomposites, compatibilizers or metal passivators.

18. (original) A nanocomposite material according to claim **1** in the form of a masterbatch comprising component (b) in an amount of from 0.03 to 90 %, based on the weight of component (a), component (c) in an amount of from 0.03 to 15 %, based on the weight of component (a), and component (d) in amount of from 0.03 to 15 %, based on the weight of component (a).

19. (original) A process for stabilizing a synthetic polymer against oxidative, thermal or light-induced degradation, which comprises incorporating in or applying to said material at least one each of components (b), (c) and (d) according to claim **1**.

20. (canceled)